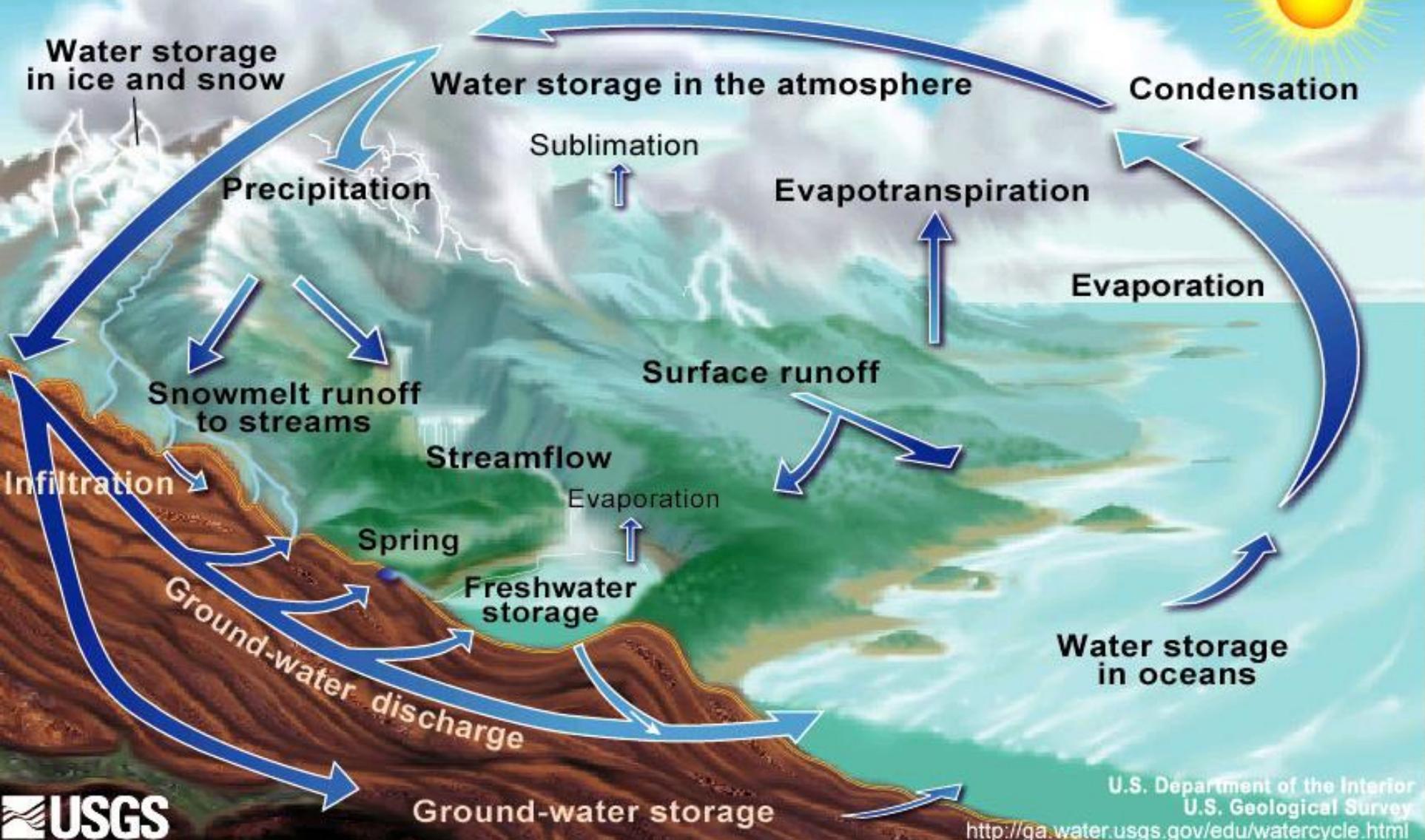


# The Water Cycle





The heat of the sun provides energy to make the water cycle work.

The sun evaporates water from the oceans into water vapor. This invisible vapor rises into the atmosphere, where the air is colder.

The water vapor condenses into clouds.

Volcanoes emit steam, which forms clouds.

Air currents move clouds all around the Earth.

Water drops form in clouds, and the drops then fall to Earth as precipitation (rain and snow).

In cold climates, precipitation builds up as snow, ice, and glaciers.

Snow can melt and become runoff, which flows into rivers, the oceans, and into the ground.

Some ice evaporates directly into the air, skipping the melting phase (sublimation).

You may think that every drop of rain that falls from the sky, or each glass of water that you drink, is brand new, but it has always been here and is a part of The Water Cycle.



# The Water Cycle



Rainfall on land flows downhill as runoff, providing water to lakes, rivers, and the oceans.

Some rain soaks into the ground, as infiltration, and if deep enough, recharges groundwater.

Water from lakes and rivers can also seep into the ground.

Water moves underground because of gravity and pressure.

Groundwater close to the land surface is taken up by plants.

Some groundwater seeps into rivers and lakes, and can flow to the surface as springs.

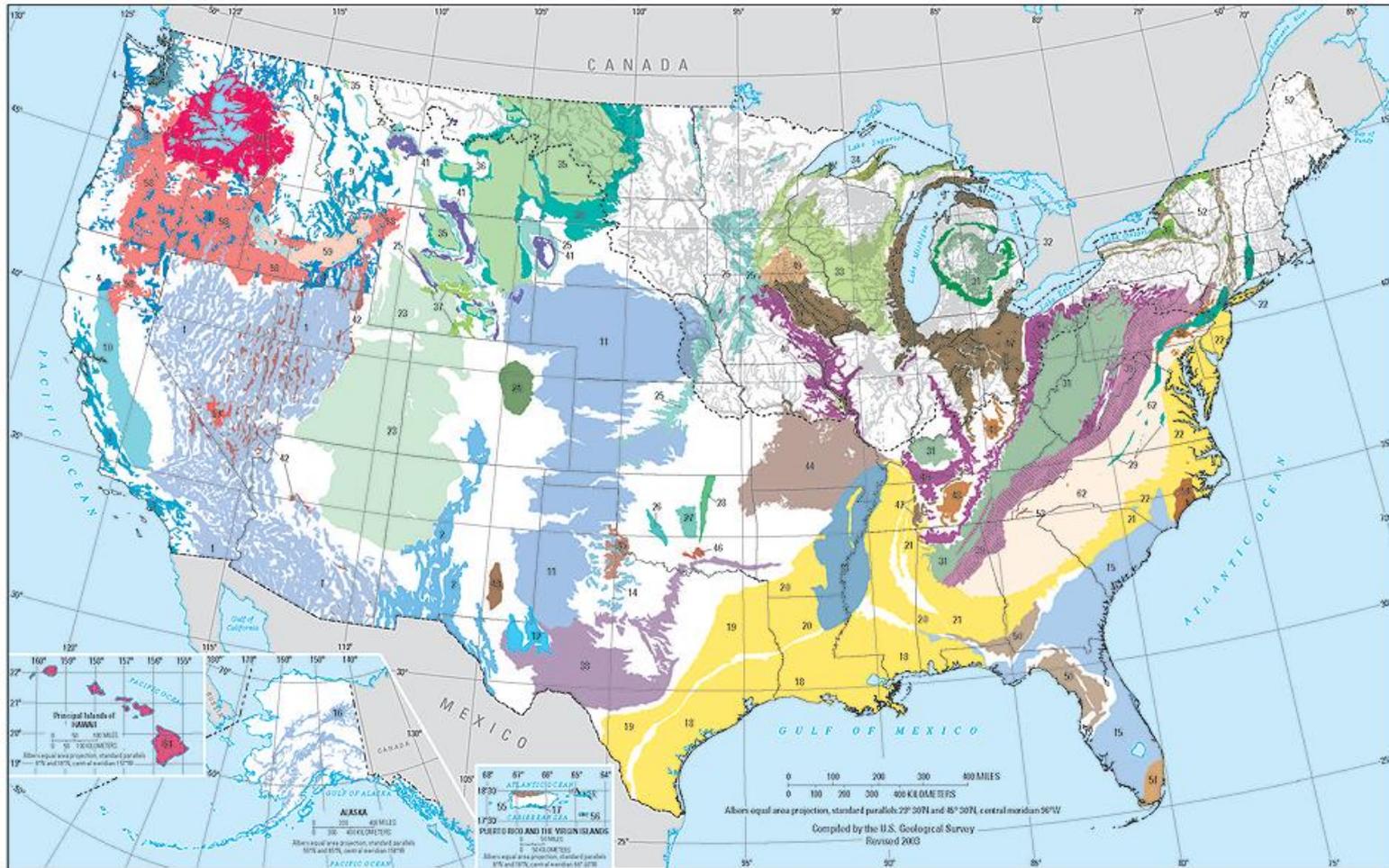
Plants take up groundwater and evaporate, or transpire, it from their leaves.

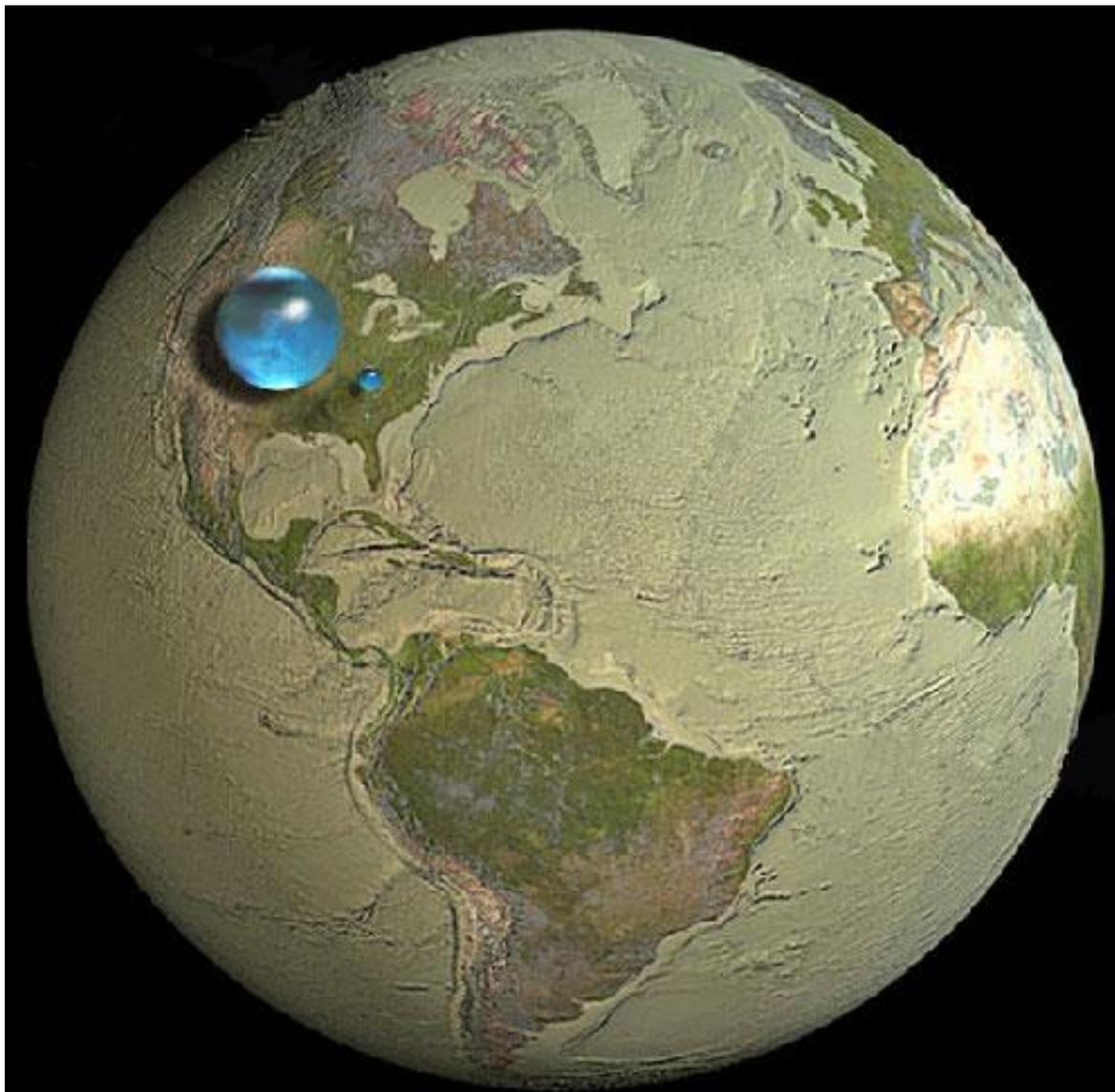
Some groundwater goes very deep into the ground and stays there for a long time.

Groundwater flows into the oceans, keeping the water cycle going.

IN WATER  
**World Water Day 2015**  
United Nations  
International Year of  
Water Cooperation

# Aquifers in the US





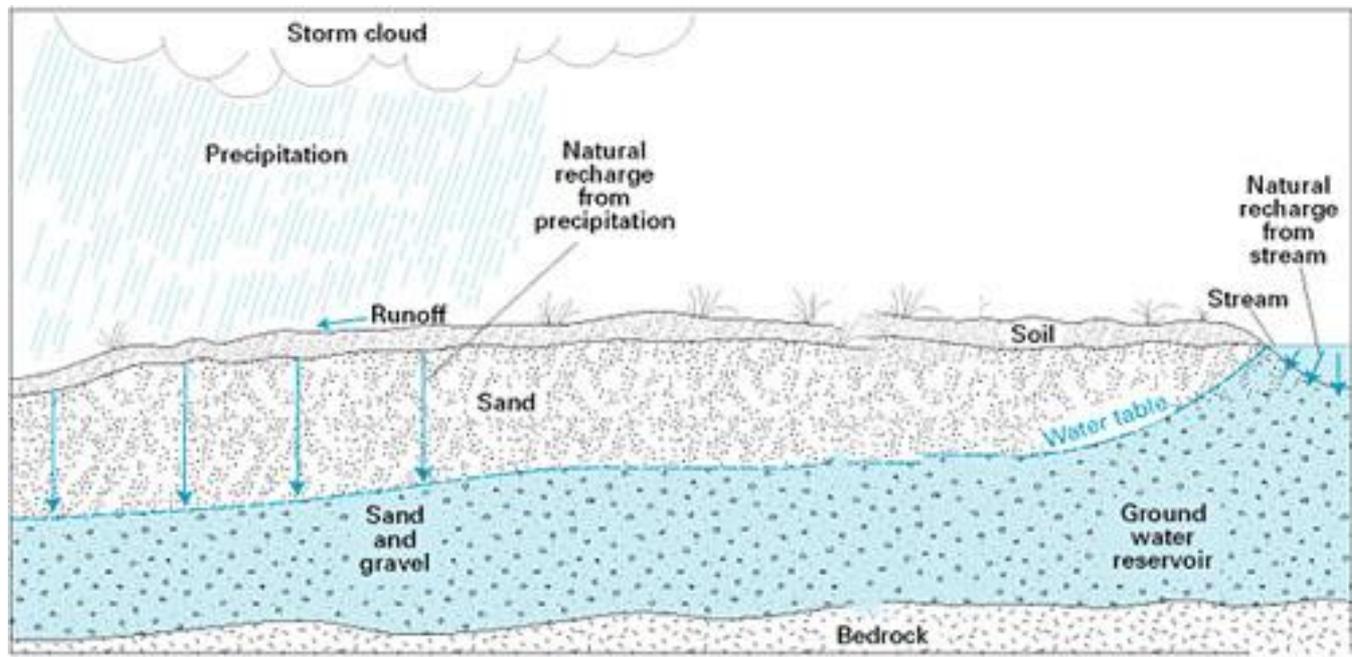
### Water in, on, and above the Earth



• Liquid fresh water

• Freshwater lakes and rivers

Howard Perlman, USGS  
Jack Cook, Adam Nieman  
Data: Igor Shiklomanov, 1993



# Highland Creek Sink









